

Notice of Allowability

Application No.

09/533,032

Examiner

McDieunel Marc

Applicant(s)

GRASSO ET AL.

Art Unit

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 4/5/2004.
2. ☒ The allowed claim(s) is/are 1,2,4-11 and 13-18.
3. ☒ The drawings filed on 22 March 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

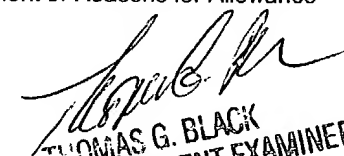
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


THOMAS G. BLACK
SUPERVISORY PATENT EXAMINER
GROUP 3600

Allowable Subject Matter

1. Claims 1, 2, 4-11 and 13-18 are allowed.
2. The following is an examiner's statement of reasons for allowance:

The prior art of record fail to teach or fairly suggest with respect to claim 1, a data cartridge handling system comprising: a data cartridge storage array having a plurality of bins each for removably receiving and storing a data cartridge; a robotic manipulator operatively positioned for selectively retrieving data cartridges from the bins, transferring the retrieved data cartridges to and from a data reading and recording device and replacing data cartridges into the bins in accordance with instructions received from a control system operatively coupled to the robotic manipulator for directing movement of the manipulator, the manipulator including a grasping hand for grasping a selected data cartridge and moving the data cartridge in and out of a bin and a camera mounted on the hand for sensing the location of the hand with reference to each of the plurality of bins, wherein the camera is operated during an audit operation initiated by the control system to provide bin location data to a memory subsequently utilized by the control system to position the grasping hand of the robotic manipulator, and wherein the camera includes an oscillator located on the hand whose output is selectively provided to enable the camera during an audit operation.; with respect to claim 8, a data cartridge handling library apparatus having reduced electromagnetic radiation emissions comprising: a plurality of data cartridge storage bins arranged around a robotic

manipulator for retrieving and replacing cartridges from and to the bins; a camera mounted on the manipulator for sensing a position of the manipulator with respect to the plurality of data cartridge storage bins, the camera being operable during an audit operation to identify each bin location; a manipulator control system operatively coupled to the robotic manipulator for selectively controlling movement of the manipulator and operating the camera to sense and record manipulator position information at each bin location and store position and bin location information in a memory accessible by the manipulator control a grasping hand on the manipulator having the camera mounted thereon, the camera having an oscillator having an output enabled by the control system, wherein the control system disables the output of the oscillator and performs data cartridge storage and retrieval operations utilizing the bin location and manipulator position information stored in the memory during normal library operations: and; with respect to claim 14, a method for reducing electromagnetic radiation emissions from a data cartridge handling library apparatus comprising the steps of: providing a plurality of data cartridge storage bins arranged around a robotic manipulator for retrieving and replacing cartridges from and to the bins providing a manipulator control system operatively coupled to the robotic manipulator for selectively controlling movement of the manipulator; providing a camera mounted on the manipulator for sensing a position of the manipulator with respect to the plurality of data cartridge storage bins; turning on the camera; performing an audit operation using the camera to identify each bin

location, record manipulator position information at each bin location and store bin location information in a memory accessible by the manipulator control system; turning the camera off, and then performing subsequent data cartridge storage and retrieval operations utilizing the bin location and manipulator position information stored in the memory to position the manipulator with the camera off; and with respect to claim 17, a method for reducing electromagnetic radiation emissions from a data cartridge handling library apparatus comprising the steps of: providing a plurality of data cartridge storage bins arranged around a robotic manipulator for retrieving and replacing cartridges from and to the bins providing a manipulator control system operatively coupled to the robotic manipulator for selectively controlling movement of the manipulator; providing a camera mounted on the manipulator for sensing a position of the manipulator with respect to the plurality of data cartridge storage bins; operating the camera during an audit operation to identify a bin location, record manipulator position information at the bin location and store bin location information in a memory accessible by the manipulator control system; and turning the camera off and then performing subsequent data cartridge storage and retrieval operations utilizing the bin location and manipulator position information stored in the memory position the manipulator with the camera off, in combination with the other elements and features of the claimed invention.


Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

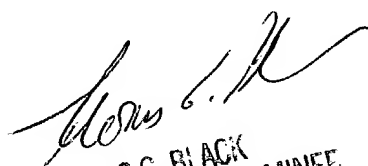
accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to McDieuneil Marc whose telephone number is (703) 305-4478. The examiner can normally be reached on 6:30-5:00 Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (703) 305-8233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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05/12/2004
MM/


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